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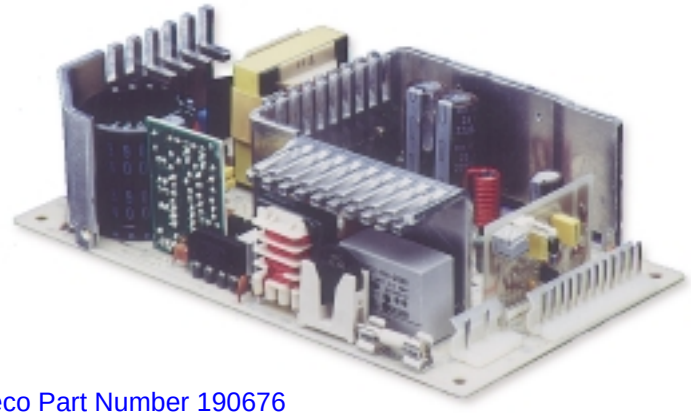
LPS 110

110 Watts

LPS 110 Series

Total Power	*80 - 110 Watts*
Input Voltages	*85 - 264 VAC* *120 - 370 VDC*
# of Outputs	*Single*



Jameco Part Number 190676

SPECIAL FEATURES

- Universal input
- High efficiency
- Remote sense
- Built-in EMI filter
- Low output ripple
- Adjustable output
- Power fail
- Overvoltage protection
- Overload protection
- Optional L bracket (-B suffix)
- Cover kit available (See page 63 or PowerFAX Doc. no. 1030)

ENVIRONMENTAL

Operating temperature: 0° to 50°C ambient derate each output at 2.5% per degree from 50° to 70°C

Electromagnetic susceptibility: Designed to meet IEC 801, -2, -3, -4, -5, -6, Level 3

Humidity: Operating; non-condensing 5% to 95%

Vibration: Three orthogonal axes, sweep at 1 oct/min, 5 min. dwell at four major resonances 0.75 G peak 5 Hz to 500 Hz, operational

Storage temperature: -40° to 85°C

Temperature coefficient: ±.04% per °C

MTBF demonstrated: >550,000 hours at full load and 25°C ambient conditions

ELECTRICAL SPECIFICATIONS

Input

Input range	85-264 VAC 120-370 VDC
Frequency	47-440 Hz
Inrush current	<18 A peak @ 115 VAC; <36 A peak @ 230 VAC, cold start @ 25°C
Input current	2.5 A max. (RMS) @ 115 VAC
Efficiency	70% typical at full load
EMI filter	FCC Class B conducted CISPR 22 Class B conducted EN55022 Class B conducted VDE 0878 PT3 Class B conducted
Safety ground leakage current	<0.5 mA @ 50/60 Hz, 264 VAC-input

Output

Maximum power	80 W for convection; 110 W with 30 CFM forced air
Adjustment range	±5% minimum
Hold-up time	20 ms @80 W load, 115 VAC nominal line
Overload protection	Short circuit protection. Case overload protected @ 110-145% above peak rating
Overvoltage protection	5 V output: 5.7-6.7 VDC. Other outputs 10% to 20% above nominal output. Latching type, recycle AC to reset.

Logic Control

Power failure	TTL logic signal goes high 50-150 msec after 5 V output. It goes low at least 4 msec before loss of regulation.
Remote sense	Compensates for 0.5 V lead drop min. Will operate without remote sense connected. Reverse connection protected.

SAFETY

VDE	0805/EN60950 (IEC950)	11774-3336-1245 (LC #84997)
UL	UL1950	E132002
CSA	CSA 22.2-234 Level 3	LR53982C
NEMKO	EN 60950/EMKO-TUE (74-sec) 203	P95100376
BABT	EN60950/BS7002	PS/605827
CB	Certificate and report	1563, 1564, 1565, 1566, 1567
CE	Mark (LVD)	

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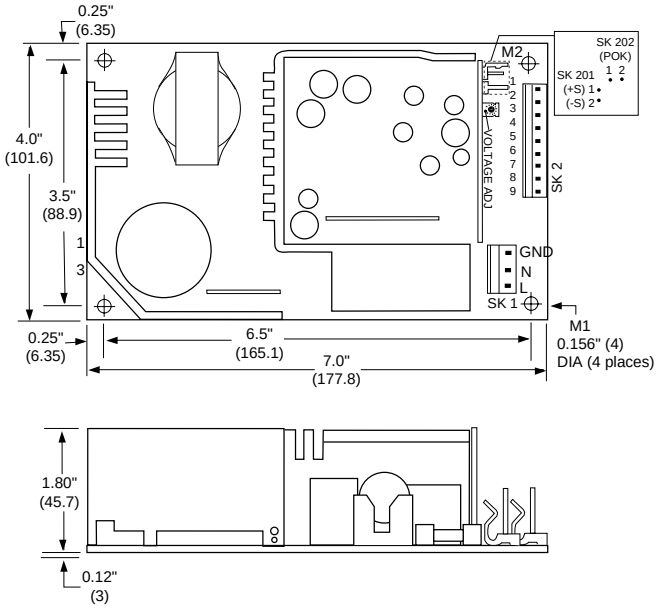
ORDERING INFORMATION

Model Number	Output Voltage	Minimum Load	Maximum Load with Convection Cooling	Maximum Load with 30 CFM Forced Air	Peak Load[1]	Regulation[2]	Ripple P/P (PARD)[3]
LPS112	5 V	0 A	16 A	22 A	25 A	±2%	50 mV
LPS113	12 V	0 A	6.7 A	9.2 A	10.4 A	±2%	120 mV
LPS114	15 V	0 A	5.3 A	7.3 A	8.3 A	±2%	150 mV
LPS115	24 V	0 A	3.3 A	4.6 A	5.2 A	±2%	240 mV
LPS118	48 V	0 A	1.7 A	2.3 A	2.6 A	±2%	480 mV

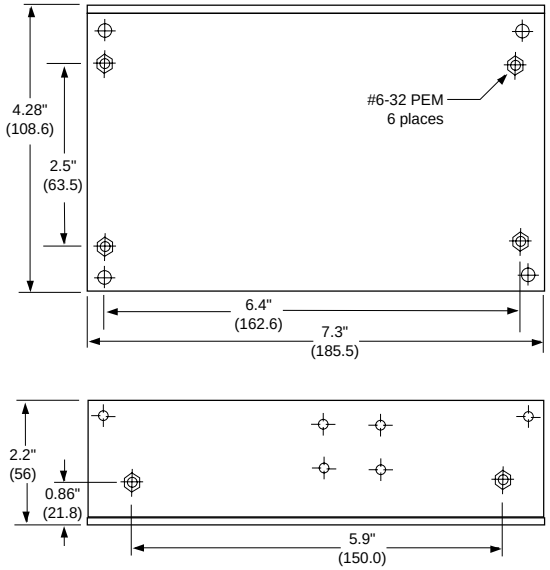
1. Peak current lasting <30 seconds with a maximum 10% duty cycle.
2. At 25°C including initial tolerance, line voltage, load currents and output voltages adjusted to factory settings.
3. Peak-to-peak with 20 MHz bandwidth and 10 µF in parallel with a 0.1 µF capacitor at rated line voltage and load.

Note: -B suffix added to model number indicates L bracket option.

DRAWINGS



(-B) BRACKET



PIN ASSIGNMENTS

Connector	LPS112	LPS113	LPS114	LPS115	LPS118
SK1-1	GND	GND	GND	GND	GND
SK1-3	Neutral	Neutral	Neutral	Neutral	Neutral
SK1-5	Line	Line	Line	Line	Line
SK2-1	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-2	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-3	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-4	Common	Common	Common	Common	Common
SK2-5	Common	Common	Common	Common	Common
SK2-6	Common	Common	Common	Common	Common
SK2-7	Common	Common	Common	Common	Common
SK2-8	+5 V	+12 V	+15 V	+24 V	+48 V
SK2-9	+5 V	+12 V	+15 V	+24 V	+48 V
SK201-1	+sense	+sense	+sense	+sense	+sense
SK201-2	-sense	-sense	-sense	-sense	-sense
SK202-1	Pok	Pok	Pok	Pok	Pok
SK202-2	GND	GND	GND	GND	GND

MATING CONNECTORS

AC Input: Molex 09-50-8051 (USA)
09-91-0500 (UK)
PINS: 08-58-0111

DC Outputs: Molex 09-50-8091 (USA)
09-91-0900 (UK)
PINS: 08-58-0111

Remote sense/power fail:
Molex 22-01-1022 (USA)
22-01-1023 (UK)
PINS: 08-50-0114

Astec Connector Kit #70-841-007

NOTES

1. Specifications subject to change without notice.
2. All dimensions in inches (mm), tolerance is ±.02".
3. Specifications are for convection rating at factory settings unless otherwise stated.
4. Mounting holes M1 and M2 should be grounded for EMI purposes.
5. Mounting hole M1 is safety ground connection.
6. L Bracket mounting (6-32) maximum insertion depth is .20" (5).
7. Warranty: 1 year
8. Weight: 1.25 lb / 0.57 kg